

ABSTRACT

A method of enhancing the efficiency and increasing the duration of action of drugs (e.g. dihydropyridines and anti-bacterials) and particularly of nifedipine and penicillins
5 wherein one or more hydrogen atoms are deuterated and wherein the deuterated drug has unexpectedly improved properties when used in much lower concentrations than unmodified drug. A method for determining the identity and bioequivalency of a new drug is also disclosed wherein the molecular and isotope structure of a new
10 drug is determined by isotope ratio mass spectrometry and compared with the molecular and isotope structure of a known human drug.